

## **PALLET**

### **BACKGROUND OF THE INVENTION**

[0001] This invention relates to a pallet for storing and transporting goods.

[0002] Pallets are often used to store and transport a load of goods. The pallets maintain the goods at a distance above the floor such that they can be readily lifted and moved by a fork of a lift truck. Some pallets have stringers or double decks forming openings that receive the forks of the lift truck. Other pallets are nestable within one another when empty to facilitate storage and transport.

[0003] The load may shift relative to the pallet during transportation of the pallet and load. A plastic wrap is sometimes used to help secure the load to the pallet. The wrap is wrapped around the load and around vertical supports of the pallet so that the connection between the pallet and load is more securely maintained. The wrap helps prevent a shift of the load relative to the pallet.

### **SUMMARY OF THE INVENTION**

[0004] The present invention provides a pallet with an upper deck that is shaped to accommodate a wrap securing goods to the pallet. The pallet according to the disclosed embodiment of the present invention includes at least one projection from at least one corner of the pallet. The projections assist in preventing the wrap from slipping off the adjacent edge of the pallet upper deck and maintain the connection between the pallet and the load.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

[0005] Other advantages of the present invention can be understood by reference to the following detailed description when considered in connection with the accompanying drawings wherein:

[0006] Figure 1 is a perspective view of a pallet according to the present invention.

[0007] Figure 2 is an enlarged perspective view of area A of the pallet of Figure 1.

[0008] Figure 3 is a top view of the pallet of Figure 1.

[0009] Figure 4 is a bottom view of the pallet of Figure 1

[0010] Figure 5 is an enlarged view of area B of the pallet of Figure 4.

[0011] Figure 6 is a side elevational view of the pallet of Figure 1 with a load of goods secured thereon.

[0012] Figure 7 is an end elevational view of the pallet of Figure 1.

[0013] Figure 8 is an alternate embodiment of a pallet according to the present invention.

## **DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS**

[0014] A perspective view of a pallet 20 according to the present invention is shown in Figure 1. The pallet 20 includes an upper deck section 22 and a lower deck section 24. The upper deck section 22 includes an upper panel 26 having side edges 28, end edges 30, and corner edges 32, shown as rounded. A lip 33 extends downwardly

from the outer circumference of the upper panel 26. A projection 34 extends outwardly from each corner edge 32 of the upper deck section 22.

[0015] The lower deck section 24 has a lip 35 extending upwardly to mate with the lip 33 of the upper deck section 22. The lower deck section 24 includes a plurality of supports or feet 40 extending downwardly therefrom. The upper deck section 22 includes a plurality of openings 36 aligned with the feet 40. Ribs 38 extend downwardly from the upper panel 26 around each opening 36 and connect with the walls of the feet 40. The feet 40 of the pallet 20 nest within the holes 36 of a similar pallet 20 stacked thereunder to reduce their overall height when stored or shipped empty.

[0016] The upper deck section 22 and lower deck section 24 are molded separately and subsequently joined at the lips 33, 35 and ribs 38 are joined with the feet 40. The deck sections 22, 24 are preferably joined by welding, adhesive or other known methods. The projections 34 assist in locating and orienting the upper deck section 22 relative to the lower deck section 24.

[0017] Figure 2 is an enlarged view of one of the corners 32 of the pallet 20 of Figure 1. The projection 34 has an upper surface 44 that is flush and continuous with an upper surface 46 of the upper panel 26 of the upper deck section 22.

[0018] Figure 3 is a top view of the pallet 20, showing the plurality of openings 36, ribs 38 and feet 40. As can be seen in Figure 3, the projections 34 do not extend outwardly to the side past the side edges 28, as shown by dashed line S, or outwardly to the ends past the end edges 30, as shown by dashed line E. Thus, the projections 34 do not interfere with the storage or transportation of the pallet 20.

[0019] Figure 4 is a bottom view of the pallet 20, in which a lower panel 50 of the lower deck section 24 is shown. The plurality of feet 40 extend downwardly from the lower panel 50 of the lower deck section 24. Figure 5 is an enlarged bottom view of the area B of Figure 4. Figure 5 shows one of the corners 32 of the pallet and the underside of the projection 34.

[0020] Figure 6 is a side view of the pallet 20 with a plurality of goods 60 stacked on the upper panel 26. Two wraps 62, 63 are wrapped over the goods 60 and the side edges 28, then around one of the feet 40 under the upper deck section 22 and over the goods 60. The wraps 62, 63 are retained at the corners 32 by the projections 34. The projections 34 keep the wraps 62, 63 from slipping off the corner 32 of the pallet 20. The wraps 62, 63 may be a plastic sheet, cloth, rope, tarp or the like. Additionally, or alternatively, wraps could be wrapped around the end edges 30 of the pallet 20 between projections 34.

[0021] Figure 7 is an end view of the empty pallet 20.

[0022] Figure 8 illustrates an alternate embodiment of a pallet 60 according to the present invention. The pallet 60 has an upper deck 62 and a lower deck 64 separated by a plurality of supports or columns 66. A corner projection 74a extends outwardly from each rounded corner edge 72 of the upper deck 62. As shown, the projections 74a may extend from a location substantially flush with an upper surface of the upper deck 62. Alternatively, or additionally, the projections 74b (only one alternate projection 74b is shown, but four would preferably be provided) may extend from a mid-point on the corner columns 66. Alternatively, or additionally, the projections 74c (only one alternate

projection 74c is shown, but four would preferably be provided) may extend from the lower deck 64 at a point substantially flush with a lower surface of the lower deck 64.

[0023] While embodiments of the invention have been illustrated and described, it is not intended that these embodiments illustrate and describe all possible forms of the invention. Rather, the words used in the specification are words of description rather than limitation, and it is understood that various changes may be made without departing from the spirit and scope of the invention. There are many different configurations for plastic pallets and many variations in design, many of which would benefit from the present invention. For example, the pallet components are preferably formed of polypropylene via an injection molding process, but of course can be formed of any type of plastic applicable for the desired use. The number and arrangement of supports 40, 66 may vary according to the size of the pallet 20, 60 and the intended application for the pallet 20, 60. The alternate locations of the projections 74b, 74c in Figure 8 are also applicable to the nestable pallet 20 of Figures 1-7.